

**Low Range Precision
Tension & Compression
LOAD CELL**

**DBCR
Series**



- **Capacities 10N to 500N**
- **Sealed to IP65**
- **High Accuracy**
- **Compact Size**
- **Robust Construction**
- **3 YEAR WARRANTY**

Options Available

Other Ranges Available on request

Spherical Rod End Bearings

Load Buttons

Different Cable Lengths

Shunt Calibration Facility

Full range of mounting options available (consult factory)

Higher Accuracy Versions available (consult factory)

DESCRIPTION

The DBCR range of low capacity high precision load cells has been designed for the measurement of compressive and tensile forces. They are used extensively for bi-directional testing across a wide range of research and industrial applications.

Typical applications include material test machines, component test rigs and general in-line force measurement. The DBCR can also be used in low capacity weighing applications, particularly with small suspended hoppers, where a slim, compact and accurate load cell is required.

There are several options available with the DBCR series which makes it possible for the user to match the product even more precisely with their requirements.

The DBCR, as with all other Applied Measurements sensors, can be supplied complete with monitoring/control electronics and calibrated as a system (please refer to the Instrumentation datasheets).

Transducer Specialists...

APPLIED MEASUREMENTS LIMITED

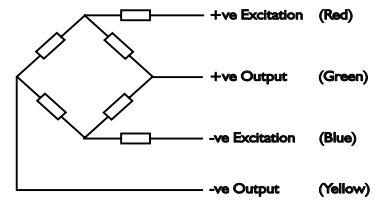
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SPECIFICATION

Wiring Schematic Diagram



| CHARACTERISTICS | DBCR | UNITS |
|-------------------------------|---|------------------------|
| Rated Capacities: | 10, 20, 50, 100, 200, 500 | N |
| Rated Output: | 2.0 ±0.1% | mV/V |
| Non-Linearity: | <0.05 | ±% of Rated Output |
| Repeatability: | <0.02 | ±% of Rated Output |
| Hysteresis: | <0.02 | % of Rated Output |
| Output Symmetry: | <0.20 | ±% of Rated Output |
| Zero Balance: | <1.0 | ±% of Rated Output |
| Temperature Range Operating: | -20 to +80 | °C |
| Compensated: | 0 to +70 | °C |
| Temperature Effect On Output: | <0.005 | ±% of Applied Load/ °C |
| On Zero: | <0.005 | ±% of Rated Output/ °C |
| Safe Overload: | 150 | % of Rated Capacity |
| Ultimate Overload: | 200 | % of Rated Capacity |
| Excitation Recommended: | 10 | Volts AC or DC |
| Maximum: | 15 | Volts AC or DC |
| Input Impedance: | 375 | Ohms |
| Output Impedance: | 350 | Ohms |
| Insulation Impedance: | >500 | Megaohms |
| Construction: | 10N-20N Aluminium Alloy, 50N-500N Stainless Steel | |
| Environmental Protection: | IP65 | |
| Cable: | 2 Metre 4 Core Screened | |

